cardiac function in patients with acute MI and received primary percutaneous coronary intervention.
Methods: This retrospective cohort study included patients presented during January 2008 to March 2011 to Peking University Third Hospital with ST-segment elevation MI. All patients received successful primary PPCI.
Results: MPV was measured serially from admission to day 7 after MI. In 375 patients, MPV reached its peak value (10.16±1.05 fL) at the admission, and then reduced by 16% within the 24 hours. Patients with poorer ventricular function, estimated by high Killip Class (≥2, n=96), had higher MPV values at all-time points studied. By logistic regression model and after adjusting for related confounders, high MPV remained as an independent predictor of Killip Class score≥2 [odds ratio (OR) = 1.873, 95% confidence interval (CI) 1.373-2.673; p = 0.001].
Conclusions: MPV undergoes rapid and dynamic changes during the acute phase of MI, and was higher in patients with high Killip Class, suggesting a predictive value of MPV in ventricular dysfunction and clinical outcome of acute phase of MI.

GW25-e2192

Transfer independently influences total ischemic time in primary percutaneous coronary intervention

Chang Huiyan[1], Zhang Ronglin[2,3]
[1]cardiovascular department, affiliated Drum-tower hospital, Nanjing medical university, [2]cardiovascular department, Nanjing Drum-tower hospital, the affiliated hospital of Nanjing university medical school, [3]Suqian People's hospital, the affiliated hospital of Xuzhou medical college

Objectives: To search independent influencing factors of total ischemic time in primary percutaneous coronary intervention.
Methods: ST segment elevation myocardial infarction patients who received primary percutaneous coronary intervention between January 2009 and December 2012 in Nanjing Drum-tower hospital were retrospectively studied. Total ischemic time was estimated as the sum of pain onset to door time and door to balloon time. Patients were divided into four groups according to the quartiles of total ischemic time. Patients' demographic information, clinical information, total ischemic time and its components were compared among the four groups. Multi-variable linear regression analysis was employed to reveal the independent infuencing factors.
Results: There was difference in senior education level, medical insurance status, transferring from another hospital, atypical chest pain, pain onset to door time, door to balloon time and total ischemic time among the four groups. Transferring from another hospital was found to be the only independent influencing factor of total ischemic time. Besides, pain onset to door time contributed more than door to balloon time to the prolongation of total ischemic time in this study.
Conclusions: Transferring from another hospital independently impacts total ischemic time, and it increases total ischemic time maily by prolonging pain onset to door time.

GW25-e4107

The Effect of Rate of Acute Myocardial Infarction Dissolved Thrombosis in Dongzhimen Hospital According To Health Education In Haiyuncang Community

Shen Xiaoxu
Cardiology Department, Dongzhimen Hospital Affiliated to Beijing University of Chinese Medicine

Objectives: To study the effect of rate of acute Myocardial Infarction Dissolved Thrombosis in Dongzhimen Hospital according to Health Education in Haiyuncang Community.
Methods: By reviewing the past three years of Dongzhimen Hospital patients admitted with acute myocardial infarction rate and the rate of thrombolytic therapy. Get patients' Statistics of time from the onset to the administration into CCU. After the health education of the community patient for one year to improve the degree of emphasis on community-related knowledge for chest pain and related symptoms of AMI to train community physicians with acute myocardial infarction thrombolytic therapy time awareness and referral consciousness, intermediate links as short as possible, get statistics of time from the onset of illness to the CCU and hospitalization rate of AMI patients within one year and the rate of thrombolytic therapy. In the end we compare and analyze the data with the previous three years' statistically.
Results: The time of patients from the onset to the entry to CCU was significantly shorter after the community health education of the patient for one year. The rate of thrombolytic therapy for acute myocardial infarction patients has improved significantly. Thrombolytic therapy rate compared with the average of the previous three years are statistically significant X^2 =2.3634 p <0.05.
Conclusions: Health Education in Haiyuncang Community to improve the degree of emphasis on community-related knowledge for chest pain and related symptoms of AMI can improve rate of Acute Myocardial Infarction Dissolved Thrombosis in Dongzhimen Hospital has important significance in saving patients dying of myocardial.

GW25-e4197

Relativity Analysis on Cystatin C and vulnerable plaque of coronary artery disease

Gu Yunfei, Jin Jun, Zhang Shouyan
Department of cardiology, LuoYang Central Hospital Affiliated To Zhengzhou University

Objectives: To study the relationship between Cys C and vulnerable plaque of coronary artery disease.
Methods: 360 patients accepted coronary angiography were consecutive enrolled our research, including 60 cases without any coronary stenosis as control guoup. The coronary artery lesions was divided into typeI, II and III plaque group by the morphology of atherosclerotic plaque. Serum Cys C, hs-CRP and lipid were measured in 60 control subjects, 85 typeIplaque, 139 type II plaque and 76 type III plaque. Then we compare Cys C, hs-CRP and lipid level of four groups using One-Way ANOVA.
Results: Cys C , low density lipoprotein cholesterol (LDL-C) and hs-CRP were significantly higher in the patients with type II than those in control, typeIand III group (P<0.05), Based on multiple stepwise logistic regression analysis, Cys C, hs-CRP, LDL-C were independent risk factors of vulnerable plaque, respectively, the relative ratio (RR) were 2.759, 1.453, 1.708 in type II plaque group. The level of Cys C was correlated positively with hs-CRP in type II group (r=0.635, P<0.01), but there are not same correlationship between Cr and hs-CRP.
Conclusions: Elevated levels of serum Cys C may have a correlation with the occurrence of coronary vulnerable plaques, which may lead to changes in plaque stability through direct effects and inflammatory factors.

GW25-e5265

The Improvement of Ticagrelor for Clopidogrel Resistance on Patients with Acute Coronary Syndrome

Xiao Yingping, Liu Huiliang
The General Hospital of Armed Police

Objectives: Aim to investigate whether ticagrelor is associated with significant improved platelet activity after PCI in patients with clopidogrel resistance suffering with acute coronary syndrome and to evaluate its efficacy and safety.
Methods: Consecutive patients admitted to Department of Cardiology in the General Hospital of Armed Police were enrolled between December 2012 and January 2014.They were patients with a diagonosis of NSTE-ACS who were scheduled for PCI.Blood samples were obtained by venipuncture of the antecubital vein respectively between 6-12h after the clopidogrel 600mg.The VASP phosphorylation analysis of blood collection was performed with BD FACSCalibur flow cytometer. According to the definition of High Platelet Reactivity (PRI≥50%) accepted internationally which was correlated well with clinical prognosis of patients undergoing PCI, confirmed by several studies and ROC curve analysis, 76 patients with high platelet reactivity (PRI≥50%) were included, and were randomized to clopidogrel 75mg qd or clopidogrel 150mg qd or ticagrelor 90mg bid.The VASP assay was performed 2days, 7days and 28days after PCI respectively. Meanwhile, the MACE, bleeding events and adverse reactions were recorded.All patients received aspirin 100mg qd.
Results: (1) 365 consecutive patients admitted for PCI were prospectively screened for inclusion in this study. A total of 289 patients were not included.Therefore, 76 patients were included and randomized to clopidogrel 75mg qd group (n=26) or clopidogrel 150mg qd group (n=25) or ticagrelor 90mg bid group (n=25). 2 patients in clopidogrel 75mg qd group, 3 patients in clopidogrel 150mg qd group and 2 patients ticagrelor 90mg bid group were drop-outs, which refused to test the platelet function. Ultimately, there were 24, 22 and 23 patients respectively finished the whole study. (2) After 28 days antiplatelet treatment, the PRI decreased in three groups, meanwhile, it was significantly lower in patients receiving ticagrelor 90mg bid group compared with other two groups.The PRI of clopidogrel 75mg qd group, clopidogrel 150mg qd group, ticagrelor 90mg bid group were 52.1%±11.2, 45.5%±9.7, 22.4%±9.4, respectively (P<0.001).After pairwise comparison they all have statistic difference (P=0.03, P<0.001, P<0.001). (3) After 28 days antiplatelet treatment, the compliance rate of PRI of clopidogrel 75mg qd group, clopidogrel 150mg qd group, ticagrelor 90mg bid group were 45.8%, 68.2%, 100%, respectively (P<0.001).After pairwise comparison clopidogrel 75mg qd group and clopidogrel 150mg qd group have no statistic difference (P=0.1>0.0125).Ticagrelor 90mg bid group has statistic difference compared with other two groups (P<0.001, P=0.003). (4) During 28 days follow-up, 2 cardiovascular adverse events and 2 minor bleeding in clopidogrel 75mg qd group;1 cardiovascular adverse events and 2 minor bleeding in clopidogrel 150mg qd group; 4 minor bleeding in ticagrelor 90mg bid group, not resulting in a statistically difference (MACE:P=0.4;minor bleeding:P=0.6), with no major bleedings recorded.
Conclusions: (1) Ticagrelor 90mg bid and clopidogrel 150mg qd can obviously suppress platelet reactivity by VASP phosphorylation analysis compared with clopidogrel 75mg qd group, and ticagrelor 90mg bid was more significantiy. (2) There is a tendency that ticagrelor 90mg bid and clopidogrel 150mg qd can reduce MACE in ACS patients with clopidogrel resistance. (3) Ticagrelor 90mg bid and clopidogrel 150mg qd did not increase bleeding events.